# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/743,196 | 12/22/2003 | Rajat Mukherjee | VER-004 | 8799 |

| | |
|---|---|
| 7590　09/11/2006 | EXAMINER |
| William L. Botjer | PONIKIEWSKI, TOMASZ |
| PO Box 478 | |
| Center Moriches, NY  11934 | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2165 | |

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/743,196 | MUKHERJEE ET AL. |
| | Examiner | Art Unit | |
| | Tomasz Ponikiewski | 2165 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>07 August 2006</u>.

2a)☐ This action is **FINAL.**     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) <u>9 and 10</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8 and 11-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>12/22/2003</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

1.     Claims 1-40 are pending.  Claims 9-10 are withdrawn from consideration.


### *Election/Restrictions*

2.     Applicant's election without traverse of group I in the reply filed on 2/09/2006 is acknowledged.

Claims 9-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 08/07/2006.

Applicant's election with traverse of group I in the reply filed on 08/07/2006 is acknowledged.  The traversal is on the ground(s) that inventions are classified in the same class.  This is not found persuasive because some classes can encompass many different directions in the art.  Querying as in claim 1 doesn't have to use the specifics of context sensitive information or recommendation list.  Query could easily be just done on a database to retrieve results and end it there.

The requirement is still deemed proper and is therefore made FINAL.


### *Claim Objections*

3.      Claims 1-2, 4, 7-8, 11-12, 14-15, and 18-20 are objected to because of the

following informalities:


Claim 2 recites the word "used for" in the body of the claim. It indicates intended

use and as such does not carry patentable weight. Applicant is required to amend the

claims so that the claim limitations are recited in a definite form.


Claims 1, 4, 7, 11-12, 15, and 20 recite the word "for" in the body of the claims. It

indicates intended use and as such does not carry patentable weight. The word could

be changed to recite "to". The limitations following the phrase "for" describes only

intended use but not necessarily required functionality of the claim. Limitations

following the phrase "for" do not carry patentable weight, which cause the claims to

appear as a series of non-functional descriptive material/data without any functional

relation with each other. Applicant is required to amend the claims so that the claim

limitations are recited in a definite form. For example, claim 4 recites "for mapping"

should be "that map" or "to map".


Claims 8, 14, and 18-20 all state the intended use by use of word "useable" or

"using". To overcome this type of objection, claims could be amended to recite definite

functionality (i.e. "executed" or "processed" or "to perform").

Claims 14-15 all state the intended use by use of word "in order to". To

overcome this type of objection, claims could be amended to recite definite functionality

(i.e. "to")


Claim 17 state the intended use by use of word "as well as". To overcome this

type of objection, claims could be amended to recite definite functionality, for example

"and".


## *Claim Rejections - 35 USC § 101*

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

5.     Claims 1 and 24 are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter.


Claim 1 has no tangible, concrete output for the steps recited. The search result

should be shown or stored for future use.


Claim 24 states the intended use by use of "for providing". To overcome this

type of rejection, claims could be amended to recite definite functionality (i.e. "that

provides" or "to provide").

## *Claim Rejections - 35 USC § 112*

6.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claim 5 recites "the nature of the application" in the body of the claim.  The

recitation is indefinite, as it does not clearly states what the "nature" could be.  "Nature"

is not concrete subject matter.

## *Claim Rejections - 35 USC § 102*

7.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

8.      Claims 1-8, 11-25 are rejected under 35 U.S.C. 102(e) as being anticipated by

Kadayam et al. (US 2003/0212673 A1).

As per claim 1 <u>Kadayam et al.</u> is directed to a method for context-sensitive querying and retrieval of search results from a plurality of heterogeneous data sources simultaneously, the method comprising the steps of:

a. receiving search query information from a user (page 5, paragraph 0052, lines 7-8);

b. interpreting the context of the search query (page 5, paragraph 0053, lines 1-3);

c. identifying a plurality of data sources for searching, the data sources being relevant to the identified context of the search query (page 5, paragraph 0053, lines 11-14);

d. framing a plurality of search requests pertinent to each of the plurality of data sources identified for searching, each of the search requests being framed in accordance with the search query information in a syntax specific to the data source being searched (page 6, paragraph 0054, lines 16-18);

e. executing the plurality of framed search requests via communication protocols specific to each of the data sources being searched, the search requests being executed simultaneously (page 6, paragraph 0054, lines 16-20);

f. retrieving search results from the plurality of data sources searched (page 6, paragraph 0054, lines 19-21); and

g. consolidating the search results to produce an integrated search result (page 6, paragraph 0054, lines 22-25).

As per claim 2 <u>Kadayam et al.</u> is directed to comprising the step of updating

relevance of data sources with respect to the query context, the update being carried

out based on the result set and user selection, the updated relevance being used for

subsequent searches (page 6, paragraph 0055, lines 21-23).


As per claim 3 <u>Kadayam et al.</u> is directed to the step of receiving search query

information comprises the step of automated registering of search query information, in

response to the user selecting a context within an active application and invoking the

search (page 6, paragraph 0059, lines 11-12, wherein when comparing the query had to

be saved/registered in memory).


As per claim 4 <u>Kadayam et al.</u> is directed to the step of interpreting the context of

a search query comprises using statistical or mathematical models for analyzing

patterns in the search query for mapping the content of the search query to a set of pre-

defined categories in accordance with specific rules (page 4, paragraph 0026, lines 17-

18; page 6, paragraph 0056, lines 1-4; page 9, paragraph 0083, lines 6-7, wherein

analysis could be done using statistical or mathematical methods).


As per claim 5 <u>Kadayam et al.</u> is directed to the step of interpreting the context of

a search query further comprises identifying current activity of the user, and content

being processed by the active application the user is currently working in, and the

nature of the application (page 5, paragraph 0053, lines 1-3).

As per claim 6 <u>Kadayam et al.</u> is directed to the step of identifying a plurality of relevant data sources comprises mapping the identified categories on a set of pre-configured data sources, the mapping being based on relevance factors of data sources with respect to each of the categories, the relevance factors representing appropriateness of content in a data source in relation to the search category (page 7, paragraph 0062, lines 8-12; page 7, paragraph 0064, lines 10-13; page 7, paragraph 0067, lines 13-14).

As per claim 7 <u>Kadayam et al.</u> is directed the step of identifying the plurality of data sources for searching further comprises the steps of:

a. recommending the data sources identified as relevant to the context of the search query to the user (page 8, paragraph 0072, lines 5-7); and

b. registering user specified choices for determining the data sources to be actually searched (page 5, paragraph 0052, lines 8-10).

As per claim 8 <u>Kadayam et al.</u> is directed to the step of consolidating the search results comprises classifying search results using classification algorithms and providing relevance ranking to the search results (page 1, paragraph 0006, second column, 4-6).

As per claim 11 <u>Kadayam et al.</u> is directed to a system for context-sensitive

querying and retrieval of search results from a plurality of heterogeneous data sources

simultaneously, the system comprising:

a. a user interface receiving search query information (figure 2; page 5,

paragraph 0048, lines 1-4);

b. a plurality of source modules, each source module configured to query and

retrieve search results based on the search query information, the search results being

retrieved from at least one of the plurality of heterogeneous data sources, the source

modules storing specific syntax and communication protocol information regarding the

associated data sources (page 5, paragraph 0053); and

c. a decision engine interpreting the search query and conducting federated

search across relevant data sources, the decision engine comprising (page 6,

paragraph 0054, line 16):

i. a classification module interpreting the context of the search query and

returned results, the context being defined through the specific content of the

search query and optionally the current user activity (page 1, paragraph, 0011,

lines 4-6);

ii. a source mapping module identifying a plurality of data sources

relevant for searching in accordance with the context of the search query (page

4, paragraph 0026, lines 17-18; page 6, paragraph 0056, lines 1-4; page 9,

paragraph 0083, lines 6-7, wherein analysis could be done using statistical or

mathematical methods); and

iii. a source module control engine controlling the plurality of source

modules for querying and retrieving data from the plurality of heterogeneous data

sources (page 3, paragraph 0019, lines 2-4).

As per claim 12 <u>Kadayam et al.</u> is directed to the user interface for receiving

search query information is invoked from within an application via at least one of: an

embedded link in the application, a short-cut key, and an alternate command, and the

interface automatically registers search query information selected in the application

(page 6, paragraph 0059, lines 11-12, wherein when comparing the query had to be

saved/registered in memory).

As per claim 13 <u>Kadayam et al.</u> is directed to the decision engine further

comprises a post-processing module merging, consolidating and formatting search

results from the plurality of data sources searched via source modules (page 1,

paragraph 0006, second column, 4-6).

As per claim 14 <u>Kadayam et al.</u> is directed to the classification module

comprises:

a. a predefined set of search categories (page 6, paragraph 0056, lines 4-9); and

b. means for using statistical or mathematical models to analyze patterns in the

search query and match them to predefined models, in order to map the query to a

plurality of the predefined search categories (page 8, paragraph 0068, lines 22-30).

As per claim 15 <u>Kadayam et al.</u> is directed to the classification module further comprises means for identifying the current user activity as defined by the current application that the user is working in, in order to get additional context information (page 8, paragraph 0072, lines 1-5).

As per claim 16 <u>Kadayam et al.</u> is directed to the source mapping module comprises:

a. a list of pre-configured data sources (page 1, paragraph, 0008, lines 3-5);

b. means for mapping a plurality of the pre-configured data sources to the identified search categories with respect to the context of a search query (page 4, paragraph 0026, lines 17-18; page 6, paragraph 0056, lines 1-4; page 9, paragraph 0083, lines 6-7, wherein analysis could be done using statistical or mathematical methods); and

c. a recommendation module suggesting the user data sources relevant to the query and registering the user response for identifying data sources to be actually searched, the relevant data sources being the data sources mapped to the identified search categories (page 8, paragraph 0072, lines 5-7).

As per claim 17 <u>Kadayam et al.</u> is directed to the source-mapping module further comprises:

a. a source statistics module storing weighted relevance factors for each of the

data sources with respect to the predefined search categories (page 7, paragraph 0067,

lines 15-18); and

b. means for updating the source statistics module, based on user search

patterns as well as explicit and implicit user feedback (page 8, paragraph 0072, lines 7-

10).

As per claim 18 <u>Kadayam et al.</u> is directed to each source module formulates a

query representing the search query information, using specific syntax for the data

source associated with the source module (page 5, paragraph 0053).

As per claim 19 <u>Kadayam et al.</u> is directed to each source module communicates

with the associated data source using the source-specific communication protocol (page

6, paragraph 0054, lines 18-19).

As per claim 20 <u>Kadayam et al.</u> is directed to the source module is configured to

perform one or more authorization steps for communicating with the corresponding

database, the authorization steps being carried out using specific authorization

information required for accessing the data source (page 1, paragraph 0011, lines 4-6).

As per claim 21 <u>Kadayam et al.</u> is directed to the system is locally installed on a

client machine (page 3, paragraph 0019, lines 18-27).

As per claim 22 <u>Kadayam et al.</u> is directed to the system resides on an enterprise

server (page 3, paragraph 0019, lines 18-27).

As per claim 23 <u>Kadayam et al.</u> is directed to the plurality of heterogeneous data

sources comprise:

a. locally accessible data sources (page 3, paragraph 0019, lines 18-27);

b. shared data sources available over a network; web accessible data sources

(figure 1, reference number 16);

c. subscription based data sources accessible through an enterprise intranet

(figure 1, reference number 22); and

d. extranet based data sources (figure 1, reference number 16).

As per claim 24 <u>Kadayam et al.</u> is directed to a computer program product for

providing context-sensitive federated search from a plurality of heterogeneous data

sources, the computer program product comprising:

a computer readable medium comprising (page 8, paragraph 0069, line 7,

wherein RAM is computer readable medium capable of storing instructions):

a. program instruction means for receiving search query information from

a user (page 5, paragraph 0052, lines 7-8);

b. program instruction means for classifying search query information into

a set of input search categories (page 5, paragraph 0053, lines 1-3);

        c. program instruction means for mapping the identified categories to a

plurality of data sources relevant for searching in accordance with the context of

the search query (page 5, paragraph 0053, lines 11-14); and

        d. program instruction means for querying and retrieving search results

from each of the data sources being searched using source specific syntax and

communication protocol information (page 6, paragraph 0054, lines 16-18).


        As per claim 25 Kadayam et al. is directed to the computer readable medium

further comprises program instruction means for consolidating and formatting search

results from the different sources being searched and presenting them to the user (page

6, paragraph 0054, lines 22-25).


### *Conclusion*

9.     The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Miller et al. (US 2001/0037332 A1)) teaches retrieving search results from multiple

databases.

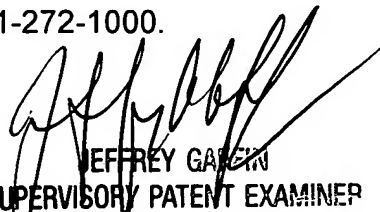Fruensgaard et al. (US 2002/0052880 A1) teaches searching multiple information

sources.

10.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tomasz Ponikiewski whose telephone number is

(571)272-1721.  The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146.  The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Tomasz Ponikiewski
September 5, 2006